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REMARKS

This Submission Under 37 C.F.R. 1.114 accompanies Applicants' Request for Continued Examination and is in supplemental response to the final Office Action mailed March 25, 2005 and is in response to the Advisory Action mailed June 15, 2005. By this response, claims 1, 15 and 17 are amended.

In view of the following discussion, the Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §102. Thus, the Applicants believe that all of these claims are now in allowable form.

It is to be understood that the Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to the Applicants' subject matter recited in the pending claims. Further, the Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

Rejections under 35 U.S.C. §102

Claims 1-19

The Examiner has rejected claims 1-19 under 35 U.S.C. §102(e) as being anticipated by Lumelsky et al. (U.S. Patent 6,377,996, hereinafter "Lumelsky"). Applicants respectfully traverse the rejection.

The Examiner alleges that in claims 1, 15 and 17, Lumelsky discloses method and apparatus for migrating a user including all aspects of Applicants' invention. The Applicants respectfully disagree.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984)(citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 U.S.P.Q. 193 (Fed. Cir. 1983)) (emphasis added). The Lumelsky reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

Independent claim 1 (and similarly claims 15 and 17) specifically recites:

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1. "A method for migrating a user from a source server module providing a content stream to said user, said content stream divided into a plurality of extents, said method comprising the steps of:
determining, for said content stream being provided to said user, a transitional extent defining an appropriate first extent to be provided to said user via a destination server module;
determining if said destination server module is capable of providing said transitional extent to said user within a first time period; and
causing said destination server module to provide said transitional extent and subsequent extents associated with said content stream to said user, each extent containing an amount of information retrieved from a single storage device of an array of storage devices during one service period." (emphasis added).

The specification specifically recites on page 7, lines 27 to page 8, line 6:

Each server module 220 (within the information server 125) includes a respective buffer. Each buffer memory is capable of holding at least one service period (i.e., one extent) worth of information retrieved from a disk array 110 via the respective server module 220. Each buffer 225 is coupled to a switch 230.

The switch 230 operates to multiplex the contents of each buffer 225 in a round robin fashion to produce an output stream OUT that is coupled to the transport processor 150 for subsequent transport to the appropriate subscribers 106 via the forward application transport channel (FATC) supported by the distribution network 140. The exemplary embodiment uses a service period of two seconds. Thus, each extent retrieved from a single disk within a disk array 210 comprises two seconds worth of information, illustratively, video information and associated audio information. (see Applicants' specification, page 7, lines 27-31 and page 8, lines 11-18, and Figures 2, and 3A and 3B). (emphasis added)

The subject application relates an extent to, illustratively, a service period of retrieved information of output from a memory device such as a disk drive array (reference the text beginning on page 7, line 27 through page 8, line 18 of the subject application). See also elements 110 (disk arrays) shown in Figure 2 and its associated text. Thus an extent represents a fixed amount of data, with that amount depending on the memory device.

Lumelsky does not even hint at the idea of an extent. It is clear from at least the portion of the Applicants' Specification depicted above that the invention of the Applicants is directed, at least in part to retrieving information from the storage device in

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a manner that efficiently manage data retrieval time. Specifically, Lumelsky does not disclose each extent is equivalent to the amount of information retrieved from a single storage device of an array of storage devices during one service period.

The Applicants respectfully submits that, in contrast to the Applicants' invention, there is absolutely no disclosure, teaching, or suggestion in Lumelsky for defining an extent for migrating a user's content stream. In particular, the Lumelsky reference discloses inserting segmentation markers into each of the content streams prior to the streaming and after the encoding of the content thereby forming segments of L bytes where L is an arbitrary integer. Specifically,

"Segmentation markers, to be identified by the client, are overlayed over a stream at precise locations. The placement of segmentation markers within a stream is content independent. According to one aspect of the present invention, the placement of segmentation markers is based on a globally known constraint, such as every L number of bytes of original data."

"In the preferred embodiment, this is accomplished prior to the decoding of the stream through the steps of:

- a) inserting segmentation markers into a stream prior to the streaming and after the encoding;
- b) exchanging information between switching parties in terms of segmentation markers during a seamless switch; and
- c) identifying, locating, and removing these segmentation markers in any such stream at the client."

(see Lumelsky, column 11, lines 33-40, column 8, lines 4-23, and Figures 4-6).

It is clearly evident from the disclosure of Lumelsky that there is absolutely no disclosure for a migrating method or apparatus for determining "a transitional extent... each extent containing an amount of information retrieved from a single storage device of an array of storage devices during one service period." Lumelsky discloses a hand-off message informing the target servers with a control message. Markers are inserting into the content stream which are used by the target server to schedule the switch and allow for the client to continue receiving the content stream without too much interruption. There is absolutely no suggestion, teaching or disclosure that any of the L byte segments defined by the segmentation markers of Lumelsky are extents.

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Specifically, Lumelsky does not disclose, teach or suggest that the L bytes should be determined with respect to the service period.

Nowhere in the Lumelsky reference is there any teaching, or even suggestion of an extent, as defined by the Applicants' invention. That is, nowhere is there any disclosure, teaching or suggestion of "each extent containing an amount of information retrieved from a single storage device of an array of storage devices during one service period." Rather, the Lumelsky reference merely discloses segmentation markers used by the target server to schedule the switch of the servers where the markers define a segment. Lumelsky does not disclose or even mention a transitional segment; therefore, Lumelsky does not disclose the target server using a transitional segment.

As explained above, a segment is not an extent. Even if Lumelsky disclose, teaches or suggest a transitional segment, it is not a transitional extent. A transitional extent includes an amount of information that maximizes the retrieval efficiency of the disk array. This inventive aspect is not disclosed, taught or suggested by the reference. Accordingly, since the Lumelsky reference fails to teach a transitional extent wherein each extent is equivalent to the amount of information retrieved from a single storage device of an array of storage devices during one service period, the Lumelsky reference fails to teach each and every element of the claimed invention, as arranged in the claims.

As such, Applicants submit that independent claims 1, 15 and 17 are not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Furthermore, claims 2-14, 16, 18 and 19 depend, either directly or indirectly, from independent claims 1, 15 and 17 and recite additional features thereof. As such and at least for the same reasons as discussed above, the Applicants submit that these dependent claims are also not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejections be withdrawn.

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CONCLUSION

Thus, Applicants submit that none of the claims, presently in the application, are anticipated under the provisions of 35 U.S.C. §102. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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